

Large scale biodiversity assessment with bird sound

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Need to clarify somewhere these were ID'd by BirdNET (not you having to scan all recordings).

Advances in hardware and software enabled broad-scaled acoustic monitoring of bird biodiversity.

We deployed a comprehensive project to explore the advantages and challenges of utilizing acoustic monitoring for assessing bird biodiversity.

Maybe "We conducted a...". "deployed" isn't the right word for this.

Maybe add that you compared species detected against known sightings from eBird

Make a bit more prominent (maybe make red?)

2020 2021 2022

30,000 hectares 66 recorders

3 seasons

ARUs, combined with BirdNET, are a time-, cost-, and labor-efficient method to survey bird communities across a large spatiotemporal scale. Subsequent analysis can inform important features for bird biodiversity.

Maybe "will investigate" rather than "can inform"

Need to be clear this is number of species detected by ARU vs eBird. As it stands, teh numbers are a bit cryptic as to what they mean.

In the list below, I would also add in what congruence their was (how many of the species detected by ARU were teh same as the eBird records - if you can say that 85% of the species detected by BirdNET were the same as those seen by observers, that is a good metric.

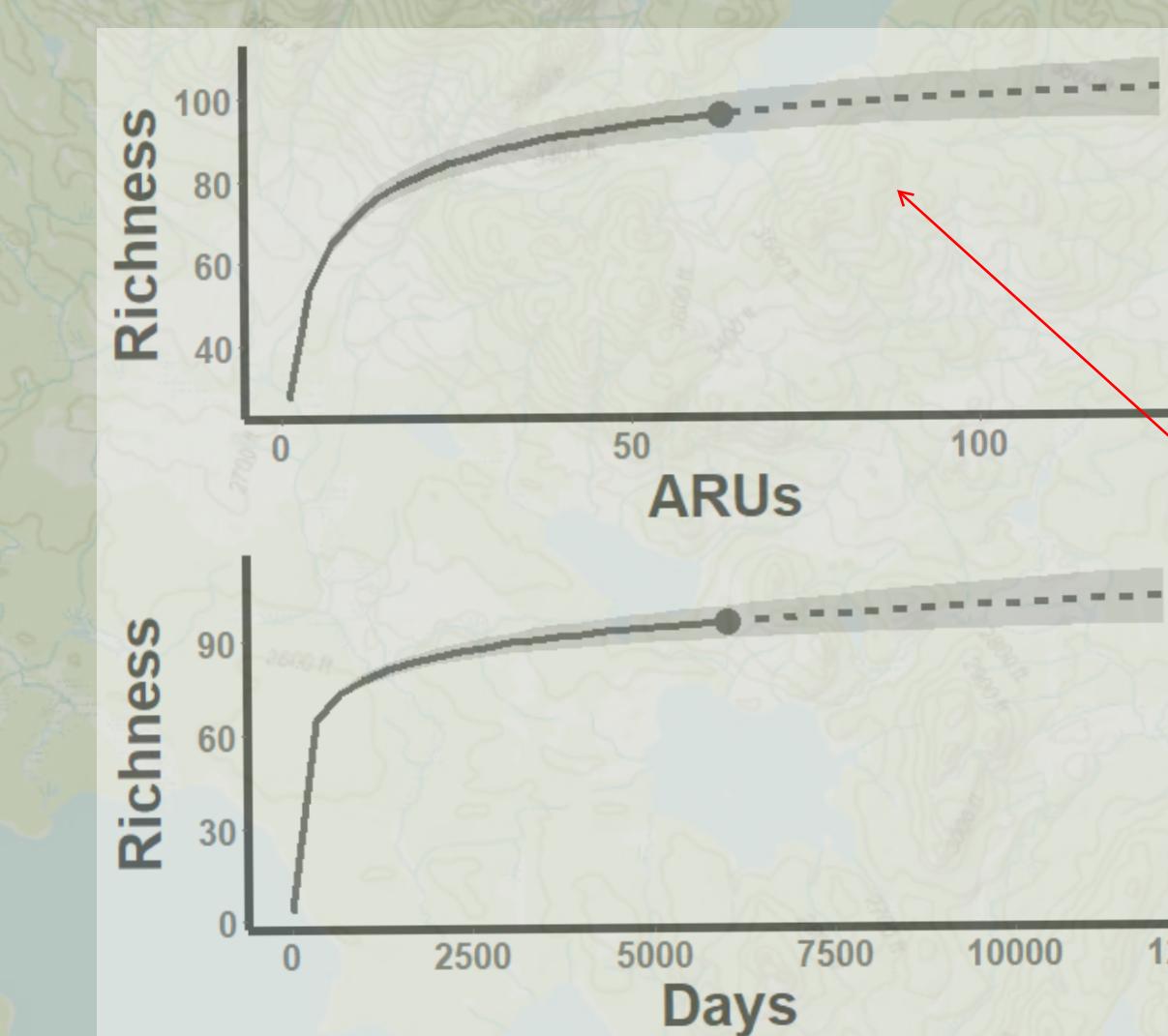
96 ARU 93 eBird → 120 species

✓ rare vocal species (i.e., crane, owls, woodpeckers)

✗ rare non-vocal species (i.e., collared dove, peregrine falcon) engage in auditory signals infrequently (i.e., bittern, grouse, hummingbird) infrequently encountered in recording site (i.e., grebe, ducks)

50 ARUs 2,500 days

Sufficient ARU effort in surveying bird composition



Add. "Detected... or Didn't Detect..." to the start of these two points.

I suggest using the graph comparing different habitats to show the higher richness associated with Mature Forest



Bird richness is higher in sites with older forest age (>80 yr).

the breakdown of hectares, sites and years might be better underneath the polygon depiction above (otherwise it is a little obscure what this graphic is)